

non-technical part, especially that dealing with health aspects seems to have been retained merely for completeness, and could easily have been omitted. On the other hand (and this is one of my major complaints), the author has been completely (and inexplicably) silent on his scientific interactions with Prof. GNR. The book would certainly have been richer had the author shared with the readers how it was to work with his research supervisor. Another negative point is the surprisingly large number of minor errors in the book e.g. names spelt wrongly, an incomplete list of students, omission of the brief post-UK stint in Bangalore from the list in the appendix, the not-so-accurate

description of the RAGA method, etc. Lack of adequate time and the author's dependence on numerous other sources were probably responsible for these avoidable lapses. This sloppiness is rather unbecoming for a book on GNR, whose insistence on meticulousness is remembered with awe by all his associates. One hopes that the second edition of the book will take care of these aspects. In summary, a most inspiring and interesting book, a welcome addition to the collection of scientific biographies, and a must-read for all practising and aspiring scientists.

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'Call of Indian Birds' – An Audio Cassette

Lt. General Baljit Singh

On the sixth day of Creation, the Bible tells us that "God saw everything that he had made and, behold, it was very good". And that is how I felt all of the sixty minutes listening to the audio cassette, produced by the *Nature Club*, Surat. After the cassette had played out, I shut my eyes and sat for long, the auditory resonances lingering in the ether around me. Yes, "it was very good".

Several days later, I replayed the cassette, three times over, for an objective assessment of the recording. I am no music aficionado

but I do trust my senses to stimulate me when a quality recording pours out. Of the 58 bird calls recorded there is none of indifferent quality. I place three calls in average recording effect. Balance 55 recordings are of good quality. Sixteen calls have one to three other bird species chirping in the background; no distraction from the main performer, rather lends to a more natural setting. There are thirteen recordings which carry background electronic-hum which is certainly unwelcome. By my judgement twenty six calls recorded are simply flawless. As an added attraction, the wrapper of the cassette doubles as a booklet with very attractive colour illustrations of all the 58 performing birds.

For technically the most perfect sound effect, I would put my money on the call of the

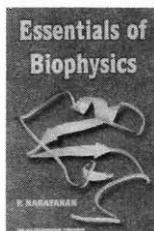


bluethroat. It comes out pure and straight from a total void as it were. On the other hand, the call of common crane and its echo in space so true to field realities is very well captured. The collective symphonics of the calls of the entire flock taking to wings is ethereal. (I have a nagging doubt here though whether this call is of the Damoiselle crane?). But for a crisp, reverberating and lingering effect the recording of the lesser golden-backed woodpecker is in a class by itself. Whether by design or accident this call is replayed as envoi with excellent effect.

All kudos to *Nature Club, Surat* (81, Sarjan Society, Surat 395 007) for this excellent offering at just Rs 125/-. I have no doubt, given wider publicity of its existence the cassette will run into several reprints. And I wish that *Nature Club, Surat* would be encouraged, cajoled, need be even bullied by nature lovers to get on with the compilation of Volume-II of the series, promptly.

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Essentials of Biophysics



Essentials of Biophysics
P Narayanan
New Age Publications
2000, pp.499.

Biological sciences at the university level, is still compartmentalized in this country into subjects such as zoology and botany, which are to a major extent descriptive. Biochemistry, molecular biology, biotechnology or life sciences are relatively newer subjects which are being taught at select universities or institutions in the country. It is also a sad reality that in some universities the newer subjects are enthusiastically included in the syllabi, with inadequate teachers, laboratory

facilities and textbooks. These things come out in the open when one talks to the fresh students being churned out of the universities, which is a different matter. Biophysics as a subject in itself is taught in very few universities, and in some instances is part of the M Phil course. In most cases it is included as one of the subjects in the different courses offered in the biological sciences and in physics course of some universities, and does not receive the attention that it deserves. This is ironic, since research in biophysics in laboratories and institutions in India is picking up at a fast pace. The majority of entrants in biophysics, and this is true in the Indian academic scene as well, are people trained in physics or chemistry i.e., people who have had these subjects at the masters level. They have the definite advantage in that they are able to add a quantitative aspect to understand biological phenomena with relative ease, and they are doing it very